

Functional Design**CATEGORY**

Outbound Interface

ITSM INCIDENT#

N/A

APPLICATION OVERVIEW

Expense reports for employee reimbursements are processed within Cardinal. Interfacing agencies can send expense report details from their agency systems into Cardinal for processing. A new Cardinal interface (RTM X-Ref AP.968) will process these inbound files and create expense reports.

After an expense report is created in Cardinal via the inbound interface, the report will be approved, budget checked and posted (liabilities). Subsequently, the Expense Journal Generator process will create journal entries for these expenses. After the journal entries have been created, agencies that have submitted expense reports would require the expense report details from Cardinal so they can tie the transaction in their agency system to the Cardinal transaction for reference purposes.

This design document outlines the process of creating an outbound file containing expense report information which will be sent to the interfacing agencies that use the Expense Report Upload. All information required to create the outbound file will be obtained from the delivered Expense tables (EX_SHEET_HDR, EX_SHEET_ADV, EX_SHEET_LINE and EX_SHEET_DIST).

Supported Business Processes

Create and Process Expense Reports

Description

- This interface extracts any posted expense reports from the expense tables to help agencies reconcile Cardinal to their agency system.

Purpose / Use

- This modification would be used statewide by interfacing agencies that submit and receive expense report details.

Processing Overview

Create a run control Page/Application Engine Program to perform the following tasks:

1. The run control page will be accessed by the batch process to trigger the extract program.
2. The run control page will have the following input parameters:
 - Business Unit – The page will allow multiple Business Units to be specified
 - From Journal Date and To Journal Date – Date range between which expense reports were posted to GL
3. The extract process will create one file for each agency listed on the run control page.
4. The process will select data for the extract based on the following criteria:
 - a. Select all expense reports (interfaced and online entered) for all the agencies listed in the run control page.
 - b. Use BUSINESS_UNIT_GL to identify the agency to which expense report belongs. Business Unit will be a required field and at least one Business Unit value must be provided for the process to run.
 - c. Select only those expense reports that have been journal generated and whose journals have been posted to the General Ledger. Use EX_ACCTG_LINE to obtain journal ID and Sheet ID
 - d. Use the JRNL_HEADER table to pull only those expense report journals whose posted date is not NULL and is in between the date range specified on the run control.
 - e. Also use EX_ACCTG_LINE.EX_DOC_TYPE = 'S' to identify only expense reports. Entries in this table imply that the expense report has already been posted.

- f. The SQL to identify expense reports as mentioned above is:
 SELECT DISTINCT A.EX_DOC_ID FROM PS_EX_ACCTG_LINE A, PS_JRNL_HEADER B WHERE
 A.EX_DOC_TYPE = 'S' AND A.BUSINESS_UNIT_GL IN (<List of BUs from run control page>) AND
 A.DST_ACCT_TYPE = 'DST' AND A.BUSINESS_UNIT_GL = B.BUSINESS_UNIT_GL AND
 A.JOURNAL_ID = B.JOURNAL_ID AND A.JOURNAL_DATE = B.JOURNAL_DATE AND B.POSTED_DT
 BETWEEN <From date and To Date on Run Control Page>;
- g. Write expense header, line, distribution and cash advance details of selected expense reports to
 extract file. Group by Business Unit so each agency's expense reports are on a separate file.
- h. Save file to a secure location.

IMPACTED OBJECT INVENTORY AND DESCRIPTION

IMPACTED OBJECTS

Please refer to the Impacted Objects section of the technical design below for a full list of impacted objects related to this work unit

RELATED LEGACY OBJECTS

In CARS, 38 agencies receive Expense Report Extract data via the CARS History Extract Interface. This will be replaced by the Expense Report Extract in Cardinal. However, we will verify which agencies will use the interface based on the selections in Agency Task 12.

The following agencies use this interfaced data in CARS today:

Parent Agency Name	Parent Agency Number
SUPREME COURT	111
VIRGINIA STATE BAR	117
DEPARTMENT OF EMERGENCY MANAGEMENT	127
DEPARTMENT OF MOTOR VEHICLES	154
VIRGINIA RETIREMENT SYSTEM	158
DEPT OF HOUSING & COMMUNITY DEVELOPMENT	165
STATE LOTTERY DEPARTMENT	172
VIRGINIA EMPLOYMENT COMMISSION	182
NORFOLK STATE UNIVERSITY	213
LONGWOOD UNIVERSITY	214
VIRGINIA COMMUNITY COLLEGE SYSTEM	260
DEPARTMENT OF AGING AND REHABILITATIVE SERVICES	262
DEPT OF AGRICULTURE & CONSUMER SERVICES	301
DEPARTMENT OF GAME AND INLAND FISHERIES	403
DEPT OF MINES, MINERALS AND ENERGY	409
JAMESTOWN-YORKTOWN FOUNDATION	425
DEPT OF CORRECTIONS-CENTRAL ACTIVITIES	799
DEPARTMENT OF HEALTH	601
DEPARTMENT OF MILITARY AFFAIRS	123
AUDITOR OF PUBLIC ACCOUNTS	133
VIRGINIA INFORMATION TECHNOLOGIES AGENCY	136
DEPARTMENT OF STATE POLICE	156

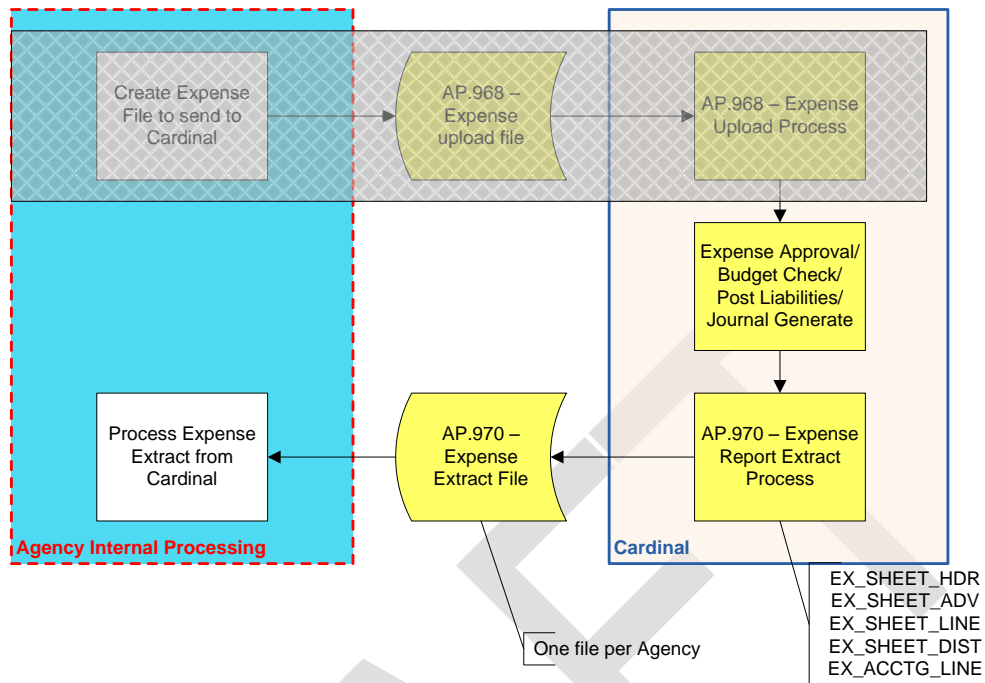
STATE CORPORATION COMMISSION	171
VIRGINIA COLLEGE SAVINGS PLAN	174
DEPARTMENT OF LABOR AND INDUSTRY	181
DEPARTMENT OF GENERAL SERVICES	194
DEPT OF CONSERVATION AND RECREATION	199
DEPT OF EDUC-CENTRAL OFFICE OPERATIONS	201
VIRGINIA MILITARY INSTITUTE	211
VIRGINIA STATE UNIVERSITY	212
CHRISTOPHER NEWPORT UNIVERSITY	242
DEPARTMENT OF ENVIRONMENTAL QUALITY	440
DEPT OF RAIL AND PUBLIC TRANSPORTATION	505
DEPT OF MEDICAL ASSISTANCE SERVICES	602
DEPT OF BEHAVIORAL HEALTH & DEVELOPMENTAL SERVICES	720
DEPARTMENT OF SOCIAL SERVICES	765
DEPARTMENT OF VETERANS SERVICES	912
DEPT OF ALCOHOLIC BEVERAGE CONTROL	999

ASSUMPTIONS

This modification is contingent upon the following assumptions:

- Expense reports created for interface agencies will not be associated with a Travel Authorization request.
- The Expense Report Extract will contain information for expense reports created by the Expense Report Upload as well as those created online for the agency.
- The design for this interface may need to be modified when additional PeopleSoft modules or additional business processes are implemented statewide in the future
- Each sub-module triggers journal entries in GL
- Transactions may be posted in sub-module but not GL due to timing and error considerations
- All activity is recorded in GL; efforts should be taken not to duplicate the impact in GL
- Offsetting entries in sub-modules are not included in the sub-module extract files but will be included in the GL.595 Journal Extract
- Interfacing agencies will be instructed to use Expense Type OTHER (instead of INTC) when creating expense reports online in Cardinal. However, there is no edit in Cardinal to prevent them from using INTC on an online expense report.
- A single file will be created for each agency Business Unit listed on the run control.

APPLICATION FLOW DIAGRAM



FILE PROCESSING

The extract file will be formatted as a text file and will contain information from four expense report tables (EX_SHEET_HDR, EX_SHEET_ADV, EX_SHEET_LINE and EX_SHEET_DIST).

The link to the layout is given below:

https://ts.accenture.com/sites/VDOT-FMS-Sharepoint/Part%203/2App/5-Design/Wave%201/FD/2-Designs/AP970_Expense_Report_Extract/AP970%20File%20Layout.xlsx

RTM CROSS-REFERENCE

This modification satisfies the following Requirements:

- AP.970 - The System shall provide the ability to transmit Expense Report transactions to agencies.

CONVERSION IMPACT

N/A

CONFIGURATION IMPACT

N/A

CHANGE MANAGEMENT IMPACT

This modification has the following change management impact:

- The file layout needs to be shared with interfacing agencies so they can process the extract file.

SECURITY / SENSITIVE DATA IMPACT

This modification has the following security impacts:

- No sensitive data should be transmitted in the interface.

TECHNICAL IMPACT

This modification has the following technical impact:

- Establish/re-use a process to transmit the expense extract file to the appropriate agencies.

BATCH IMPACT

This modification has the following batch impacts:

- Batch will need to be given access to the new run control page in order to execute the extract process.
- The extract process will be scheduled to run daily after the Expense Journal generator process runs and before Pay Cycle Payment Selection.

RELATED WORK UNITS

This modification is related to the following work units:

- FD_AP968 – Expense Report Upload

TESTING SCENARIOS

No.	Description
1	Execute process for multiple agencies to ensure extract file is created successfully. Verify that a separate file is created for each Business Unit (Agency) identified in the run control.
2	Verify that the expense reports in the file all have the same journal date as in the run control and also that they are posted.
3	Verify file layout and format to ensure it is according to specifications.

OPEN ISSUES

#	Issue	Owner	Response
1	An agency can submit expense reports on behalf of other agencies and so there is a need to group expense report extracts by the parent agency that submitted the report rather than the agency for which it was submitted	Application Leads	The option of a Business Unit roll up tree is being considered whereby the run control will be altered to pass the tree node so it can run for all business units in that node. Each node will have a parent node reflecting the parent agency.
2	Need to see if we can setup functions and subpages to be used across all interfaces	Development Lead	
3	10/24/13: During the Build phase, this design needs to be updated in order to use the new BU security roll-up tree. Additionally, a free form sequence number field will be added to the run control page to permit the PPS team to specify/override the sequence number assigned to the outbound file names (this sequence number will otherwise default to '001').	Mike Thompson	Closed - Both functionalities are included in the build.

Note: The Open Issues section should be used by the technical designer to track open issues. This can also be used to track items that come up in peer review. Prior to going to inspection review all items should be addressed and grayed out.